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10/674,409	10/01/2003	Thomas M. Fudali	66396-072	5122

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EXAMINER	
BODDIE, WILLIAM	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/674,409	FUDALI ET AL.	
	Examiner	Art Unit	
	WILLIAM L. BODDIE	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 July 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) *10-24* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. In an amendment dated, July 12th, 2010, the Applicants traversed the rejection of claims 1-9 and amended claim 1. Currently claims 1-9 are pending.

Response to Arguments

2. On page 8 of the Remarks, the Applicants argue that Barker does not disclose the display of an instrument identity banner including details of the type and status of a diagnostic instrument. The Applicants specifically argue that the display in Barker is for technical service bulletins and not a diagnostic instrument. Arguing that figure 6 merely discloses banners and items which have nothing to do with a diagnostic instrument

3. The Examiner respectfully disagrees. The Examiner maintains that the cited portions of figure 6 are well-within the broadest reasonable interpretation of the term "diagnostic instrument." To further explain all of figures 1 and 2, despite the vehicle under test in figure 1, are seen as encompassing the "diagnostic instrument" of the claim. With such an understanding, part of that system is the display on figure 6 which displays TSBs. Thus TSBs are part of a diagnostic instrument. Furthermore the express listing of the status of the system in figures 1 and 2 is seen as disclosing at least some status of the diagnostic instrument.

4. Applicants' seem to merely contend that a diagnostic instrument can be connected to Barker's system, but that Barker's system is not a diagnostic instrument. Such an interpretation of Barker's device seems overly narrow. As further evidence that the system itself functions as a diagnostic instrument, the Applicants are directed to column 2, line 66 - column 3, line 5. Therein Barker expressly labels the system as a

"Vehicle Diagnostic System" and to "facilitate diagnostic functionality in VDS 10, a diagnostic tool may be coupled between a vehicle 20 and one of the clients 16." It seems clear to the Examiner that these disclosures remove any doubt that figure 6 is displayed on a diagnostic instrument and therefore, anything in figure 6 is seen as describing the diagnostic instrument.

5. Applicants are additionally directed to column 10, lines 25-51 of Barker. It should be very clear from the description given therein that the device of Barker is indeed a diagnostic instrument, as a whole, and that the procedures, current status, type, and results are presented to the technician.

6. As discussed above the rejections of claims 1-9 are seen as proper and are thus maintained in the current office action.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 1-4 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawasaki et al. (US 7,123,243) in view of Szukala et al. (US 6,801,849) and further in view of Barker (US 6,314,422).

With respect to claim 1, Kawasaki discloses, a non-transitory computer-readable storage medium for storing instructions for invoking a function of an instrument (fig. 5), the code, once executed, causing the instrument to display:

a first navigational menu (12a in fig. 5) including at least one display element (51 in fig. 5), the at least one display element having a touch sensitive active region therein (box surrounding the graphic in 51 in fig. 5) and a graphical representation of functionality invoked via user selection of the display element by user contact with the touch sensitive active region (graphic and box in 51 in fig. 5), the display element and the touch sensitive active region being located on the same surface of a display screen of the diagnostic instrument (fig. 5 discloses a display element (graphic and box) which also contains a touch sensitive active region that are located on the same surface of the device; note col. 6, lines 12-16; "the user performs an input operation by touching with the finger or pen to these touch keys." From fig. 5, the display element (icon, 51) and the touch sensitive active region the (box, 51) are located on the same surface, as the user can select the icon with their finger from the figure 5 view); and

an instrument identity banner including details of the type (pioneer label in fig. 2) and status (volume is at step 18 in fig. 2) of the instrument.

Kawasaki does not expressly disclose, that the interface is for a diagnostic instrument, a second navigational menu or displaying the status of the instrument.

Szukala discloses a touch user interface (fig. 7a-b) for invoking a function of a diagnostic instrument (engine diagnostic), the user interface comprising:

a first navigational menu (fig. 7a-b) including at least one display element (each menu selection, static info…); and

a second navigational menu (fig. 11, for example) configured to be displayed responsive to contact on the touch sensitive active region of the at least one display

element (Static Tests icon in fig. 7b), the second navigational menu including a selection group related to a test suite of the diagnostic instrument (fuel injector, ignition firing etc. in fig. 11); and

an instrument identity banner including details of the type (each display has a title which identifies what the current instrument of the device being used is; "Engine reporting" in fig. 14b) and status (“working” in fig. 14b) of the diagnostic instrument.

Kawasaki and Szukala are analogous art because they are both from the same field of endeavor namely design of PDA touch user interfaces.

At the time of the invention it would have been obvious to one of ordinary skill in the art to use the instrument of Kawasaki as a diagnostic tool and include a second navigational menu as taught by Szukala.

The motivation for doing so would have been the need for a portable engine diagnostic device (Szukala; col. 2, lines 15-17) as well as the well-known benefit of providing a main menu and submenus to help a user more quickly reach the function they desire.

Kawasaki and Szukala do not explicitly disclose an instrument identity banner including details of the type and status of the diagnostic instrument.

Barker discloses a user interface for a diagnostic instrument comprising, an instrument identity banner (top of 70 in fig. 6) including details of the type (TSBs/Recalls and/or 1996 Intrepid and/or the VIN and/or tech name in fig. 6) and status (Status: disconnected in fig. 6) of the diagnostic instrument (fig. 2, for example).

Barker, Kawasaki and Szukala are analogous art because they are both from the same field of endeavor namely design of user interfaces.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the type and status information in a banner on the interface of Kawasaki and Szukala as taught by Barker.

The motivation for doing so would have been the well-known advantage of providing the user quick “at-a-glance” basic information and providing quick easy location of the desired information (Barker, col. 6, lines 34-55).

With respect to claim 2, Barker, Kawasaki and Szukala disclose, the medium of claim 1 (see above).

Kawasaki, when combined with Szukala, further discloses, wherein the selection group includes a plurality of display elements (Szukala; fuel injector, ignition firing etc in fig. 11), each of the plurality of display elements having a touch sensitive active region to enable user selection of the plurality of display elements (Szukala; col. 13, lines 1-9).

With respect to claim 3, Barker, Kawasaki and Szukala disclose, the medium of claim 1 (see above).

Kawasaki, when combined with Szukala, further discloses, wherein the selection group includes fewer than ten display elements to permit discrete touch sensitive selection of each of the fewer than ten display elements (Szukala; only 5 in fig. 11).

With respect to claim 4, Barker, Kawasaki and Szukala disclose, the medium of claim 1 (see above).

Kawasaki further discloses, wherein the first navigational menu includes at least six display elements (nine in fig. 5), each of the at least six display elements having a discrete touch sensitive active region sized to permit finger tip selection (note the size of the icons in fig. 2 and their relation to the user's finger tips).

With respect to claims 7, Barker, Kawasaki and Szukala disclose, the medium of claim 1 (see above).

Kawasaki further discloses, wherein the touch sensitive active region comprises an area having a polygonal shape (rectangle) of at least 1/4 square inch (see finger sized relation to the icon size in fig. 2, icons in fig. 2 are even smaller than icons shown in fig. 11).

9. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kawasaki et al. (US 7,123,243) in view of Szukala et al. (US 6,801,849), Barker (US 6,314,422) and further in view of Banks et al. (US 6,603,494).

With respect to claim 5, Barker, Kawasaki and Szukala disclose, the medium of claim 1 (see above).

Neither Kawasaki, Barker nor Szukala expressly disclose including a textual description of the functionality with the graphic.

Banks discloses, a diagnostic instrument, comprising a touch-based user interface, wherein at least one display element comprises

a textual description of functionality invoked by user selection of the display element (schedule, close, analyze, for example in fig. 5).

Banks, Kawasaki, Barker and Szukala are analogous art because they are from the same field of endeavor namely design of touch user interfaces.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include textual descriptions alongside the graphics of Kawasaki, Szukala, and Barker.

The motivation for doing so would have been the well-known benefit of removing any question in the user's mind what the graphic represents.

10. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kawasaki et al. (US 7,123,243) in view of Szukala et al. (US 6,801,849), Barker (US 6,314,422) and further in view of Debrus et al. (US 5,598,527).

With respect to claim 6, Barker, Kawasaki and Szukala disclose, the medium of claim 1 (see above).

Kawasaki further discloses, wherein the touch sensitive active region comprises a circular area with a diameter of at least 3/8 inch (3/8 inch diameter is almost half the size of a dime; Kawasaki discloses a space at the *very* least that large as seen in fig. 2).

Kawasaki, Barker and Szukala do not expressly disclose wherein the touch sensitive active region comprises an approximately circular shape.

Debrus discloses, a touch sensitive device wherein a touch sensitive active region (13-20 in fig. 1) comprises an approximately circular shape (see fig. 1) with a diameter of at least 3/8 inch (col. 3, lines 27-30; 47 is approx. 6 inches long which equates to at least a diameter of at least 6/8 of an inch).

Debrus, Kawasaki, Barker and Szukala are analogous art because they are from the same field of endeavor namely, touch screen device design and implementation.

At the time of the invention it would have been obvious to one of ordinary skill in the art to size the display elements of Kawasaki, Barker and Szukala to permit finger tip selection as taught by Debrus.

The motivation for doing so would have been the well known benefit of allowing the user to more easily locate the icons.

The currently claimed differences in shape over Kawasaki and Szukala in view of Debrus are not seen as patentably distinct from the prior art. In short, whether the touch regions are polygons or circular is immaterial and insignificant. The device will not perform differently should the user inter face use polygons or circular shapes for the touch regions. The Applicant is directed to section 2144.04.IV.A-B of the MPEP.

11. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kawasaki et al. (US 7,123,243) in view of Szukala et al. (US 6,801,849), Barker (US 6,314,422) and further in view of Ross et al. (US 5,859,628).

With respect to claim 8, Barker, Kawasaki and Szukala disclose, the medium of claim 1 (see above).

Neither Kawasaki, Barker nor Szukala expressly disclose, wherein the touch sensitive active region comprises at least 1/10 of the screen area.

Ross discloses, a user interface (fig. 6d), and that the touch sensitive active region comprises at least 1/10 of the screen area (also clear from fig. 6d).

At the time of the invention it would have been obvious to one of ordinary skill in the art to size the display elements of Kawasaki, Barker and Szukala to span the entire display area as taught by Ross.

The motivation for doing so would have been to allow the user to more easily recognize the icons and text of the screen (Ross; col. 7, lines 11-12; for example).

12. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kawasaki et al. (US 7,123,243) in view of Szukala et al. (US 6,801,849), Barker (US 6,314,422) and further in view of Cross et al. (US 7,154,481).

With respect to claim 9, Barker, Kawasaki and Szukala disclose, the medium of claim 1 (see above).

Neither Kawasaki, Barker nor Szukala expressly disclose, wherein the first and second navigational menus are displayed on a touch screen device sized and positioned so as to be responsive to a gloved finger.

Cross discloses a touch screen wherein the device is sized and positioned so as to be responsive to a gloved finger (col. 4, lines 47-49).

Cross, Kawasaki, Barker and Szukala are analogous art because they are from the same field of endeavor namely, touch screen device design and implementation.

At the time of the invention it would have been obvious to one of ordinary skill in the art to construct the touch screen of Kawasaki, Barker and Szukala in the manner of Cross to ensure that the device is responsive to a gloved finger.

The motivation for doing so would have been as a convenience and ease of use to the user to not have to remove any gloves in order to operate the machine. This is

especially applicable to Kawasaki, Barker and Szukala, which is likely to be used in automobile repair centers where gloves are commonly worn.

Conclusion

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIAM L. BODDIE whose telephone number is (571)272-0666. The examiner can normally be reached on Monday through Friday, 7:30 - 4:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/William L Boddie/
Examiner, Art Unit 2629
8/24/2010